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## Product Data Sheet

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<b>Cat#:</b>	AD-125-U
<b>Cat#:</b>	AD-125-B, Biotin labeled
<b>Cat#:</b>	AD-125-F, FITC labeled
<b>Product Description:</b>	Lactobacillum acidophilus (hemag1P)
<b>Aptamer Type:</b>	DNA
<b>Sequence:</b>	5'- AGCAGCACAGAGGTCAGATGTAGCCCTTCAACATAGTAATATCTCTGCATTCTGTGTGCCTATGCGTGCTACCGTGAA-3'; 78-mer
<b>Size</b>	100 nM
<b>Mol. Wt:</b>	24010.64 g/mole
<b>Purity:</b>	>95%
<b>Affinity:</b>	13 nM (reported value)
<b>Comments:</b>	Most likely target is the S-layer protein expressed on the cell surface.
<b>Notes:</b>	To eliminate the need of purifying target molecules on the cell surface, selection technique using live bacterial cells in suspension as targets, to select for ssDNA aptamers specific to cell surface molecules is developed here. Aptamer pools obtained after 6–8 rounds of selection demonstrated high affinity for and selective binding with L. acidophilus cells when tested via flow cytometry, microscopy, and fluorescence measurements. Hemag1P, was found to bind to L. acidophilus much more strongly and specifically than other cells tested with a predicted tight hairpin secondary structure.
<b>References:</b>	Hamula et al. "Selection of Aptamers against Live Bacterial Cells." Analytical Chemistry, 80(2008): 7812-7819.

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**India Contact:**

**Life Technologies (India) Pvt. Ltd.**

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444  
Email: [customerservice@lifetechindia.com](mailto:customerservice@lifetechindia.com) Website: [www.lifetechindia.com](http://www.lifetechindia.com)